

AMENDMENTS

In the Claims:

Claims 1-53 (Canceled).

Claim 54 (Currently Amended): A commercially acceptable broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a ~~minimum~~ maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said plant.

C1 Claim 55 (Currently Amended): Seed produced by the plant of claim 54, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said plant.

Claim 56 (Currently Amended): Progeny seed produced from crossing the broccoli plant of claim 54 with another plant, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said plant.

Claim 57 (Currently Amended): A commercially acceptable broccoli plant or its parts produced from the seed of claim 56 54.

Claim 58 (Currently Amended): A commercially acceptable broccoli plant regenerated from tissue culture of the broccoli plant of claim 57, wherein such regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed

to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said regenerated plant.

Claim 59 (Currently Amended): A tissue culture of the broccoli plant of claim 57 ~~according to claim 58~~ comprising regenerable cells selected from the group consisting of meristematic tissue, anthers, leaves, ovules, roots, embryos, protoplasts and pollen, wherein such tissue culture, if regenerated, would produce a regenerated plant comprising a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said regenerated plant.

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Claim 60 (Currently Amended): A commercially acceptable regenerated broccoli plant regenerated from the regenerable cells of a tissue culture according to claim 59 wherein said regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 90°F for at least 5 consecutive days during the growth cycle of said plant.

Claim 61 (Currently Amended): A commercially acceptable broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said plant.

Claim 62 (Currently Amended): Seed produced by the plant of claim 61, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said plant.

Claim 63 (Currently Amended): Progeny seed produced from crossing the broccoli plant of claim 61 with another plant, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said plant.

Claim 64 (Currently Amended): A commercially acceptable broccoli plant or its parts produced from the seed of claim 63 ~~64~~.

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Claim 65 (Currently Amended): A commercially acceptable broccoli plant regenerated from tissue culture of the broccoli plant of claim 64, wherein such regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said regenerated plant.

Claim 66 (Currently Amended): A tissue culture of the broccoli plant of claim 64 ~~according to claim 65~~ comprising regenerable cells selected from the group consisting of meristematic tissue, anthers, leaves, ovules, roots, embryos, protoplasts and pollen, wherein such tissue culture, if regenerated, would produce a regenerated plant comprising a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said regenerated plant.

Claim 67 (Currently Amended): A commercially acceptable regenerated broccoli plant regenerated from the regenerable cells of a tissue culture according to claim 67 wherein said regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 95°F for at least 1 day during the growth cycle of said plant.

Claim 68 (Currently Amended): A commercially acceptable broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 85°F for at least 15 days during the growth cycle of said plant.

Claim 69 (Currently Amended): Seed produced by the plant of claim 68, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 85°F for at least 15 consecutive days during the growth cycle of said plant.

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Claim 70 (Currently Amended): Progeny seed produced from crossing the broccoli plant of claim 68 with another plant, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 85°F for at least 15 consecutive days during the growth cycle of said plant.

Claim 71 (Original): A commercially acceptable broccoli plant or its parts produced from the seed of claim 70.

Claim 72 (Currently Amended): A commercially acceptable broccoli plant regenerated from tissue culture of the broccoli plant of claim 71, wherein such regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 85°F for at least 15 consecutive days during the growth cycle of said regenerated plant..

Claim 73 (Currently Amended): A tissue of the broccoli plant of claim 71 culture ~~according to claim 72~~ comprising regenerable cells selected from the group consisting of meristematic tissue, anthers, leaves, ovules, roots, embryos, protoplasts and pollen, wherein such tissue culture, if regenerated, would produce a regenerated plant comprising a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 85°F for at least 15 consecutive days during the growth cycle of said regenerated plant.

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Claim 74 (Currently Amended): A commercially acceptable regenerated broccoli plant regenerated from the regenerable cells of a tissue culture according to claim 73 wherein said regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 85°F for at least 15 20 days during the growth cycle of said plant.

Claim 75 (Currently Amended): A commercially acceptable broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 80°F for at least 20 days during the growth cycle of said plant.

Claim 76 (Currently Amended): Seed produced by the plant of claim 75, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum temperature of at least 80°F for at least 20 consecutive days during the growth cycle of said plant.

Claim 77 (Currently Amended): Progeny seed produced from crossing the broccoli plant of claim 75 with another plant, wherein such seed produces a broccoli plant comprising a center head having a diameter of 3 to 8 inches at maturity when said plant is exposed to a maximum

temperature of at least 80°F for at least 20 consecutive days during the growth cycle of said plant.

Claim 78 (Currently Amended): A commercially acceptable broccoli plant or its parts produced from the seed of claim ~~77~~ 75.

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Claim 79 (Currently Amended): A commercially acceptable broccoli plant regenerated from tissue culture of the broccoli plant of claim 78, wherein such regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 80°F for at least 20 consecutive days during the growth cycle of said regenerated plant.

Claim 80 (Currently Amended): A tissue culture of the broccoli plant of claim 78 ~~according to claim 79~~ comprising regenerable cells selected from the group consisting of meristematic tissue, anthers, leaves, ovules, roots, embryos, protoplasts and pollen, wherein such tissue culture, if regenerated, would produce a regenerated plant comprising a center head having a diameter of 3 to 8 inches at maturity when said regenerated plant is exposed to a maximum temperature of at least 80°F for at least 20 consecutive days during the growth cycle of said regenerated plant.

Claim 81 (Currently Amended): A commercially acceptable regenerated broccoli plant regenerated from the regenerable cells of a tissue culture according to claim 80 wherein said regenerated plant comprises a center head having a diameter of 3 to 8 inches at maturity when said plain is exposed to a maximum temperature of at least 80~~5~~°F for at least ~~15~~20 days during the growth cycle of said plant.
